terms included those related to CC, risk factor and Chinese population. The search was not restricted in terms of time span or language. The abstracts and selected manuscripts were assessed (content and quality) by two independent reviewers. **RESULTS:** 1,737 citations were identified and screened and approximately 100 publications were included for data synthesis. All studies were conducted at regional level, but not country level. Main risk factors reported as statistically associated to CC were: 1) socio-demographics: age and education level; 2) life-style behaviour: dietary consumption, smoking status and personal hygiene; 3) sexual behaviour: number of partners (self and partner), number of marriages, age at sexual debut, age at first marriage; 4) gestational factors: age at first pregnancy, total number of pregnancies, contraceptive method; 5) screening and disease history: cervical screening, gynaecological diseases, family disease history and other diseases. Large heterogeneity exists between the studies in the definition used for these risk factors. **CONCLUSIONS:** This systematic review provided an up-to-date insight of risk factors for developing CC in China. Due to heterogeneity, further evaluation is needed to allow combining risk factors. A statistical analysis is warranted to assess the contribution of each risk factor to the overall risk.

CANCER – Cost Studies

PCN6

BUDGET IMPACT MODEL OF SUNITINIB AS FIRST LINE TREATMENT OF METASTATIC RENAL CELL CARCINOMA IN CHINA

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OBJECTIVES: Sunitinib is an oral multi-targeted tyrosine kinase inhibitor approved globally for the first- and second-line treatment of metastatic renal cell carcinoma (mRCC). The purpose of this study was to assess the budget impact of using sunitinib as first-line therapy in urban Chinese patients from a Chinese payer perspective. **METHODS:** A user friendly budget impact model was constructed to compare the overall budget impact with and without sunitinib incorporated in the formulary. An up to 3-year time horizon with 6 weekly cycle treatment was used to estimate the overall budget impact for mRCC patients from a third-party payer perspective. The analysis was conducted with the following 3 comparators based on China treatment pattern included in the model: sunitinib, INF-a, and sorafenib. Epidemiology data, drug costs, adverse events information, and health care resources associated with the treatments and adverse events (AE) were obtained from the literature. Costs were expressed in 2013 prices. The analysis used Shanghai population as the base case. Budgetary impact for other large cities in China can be estimated by substituting the various city populations. **RESULTS:** In Shanghai, patients eligible for first line treatment were estimated at 892. If Sunitinib is added into the formulary with the current retail price, the estimated net budgetary impact for 3 years total is RMB82,369,048.84. This is equivalent to about RMB0.10 budget impact per member per month (PMPM) with significantly improved clinical efficacy. A sensitivity analysis indicated that the increased budget impact is a direct result of patients on Sunitinib treatment experienced superior Mean progression free survival time over competitors. **CONCLUSIONS:** The results suggested that the addition of Sunitinib in the formulary as first-line therapy for mRCC in urban China would improve patient clinical outcomes with moderate impact on the overall payer budget.

PCN7

HEALTH CARE RESOURCE USE AMONG ADVANCED GASTRIC CANCER PATIENTS IN TAIWAN AND SOUTH KOREA

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OBJECTIVES: To assess health care resource use associated with the treatment of metastatic and/or locally recurrent, unresectable gastric cancer (MGC), including cancer of the stomach and gastro-oesophageal junction, in Taiwan and South Korea. **METHODS:** Physicians, randomly selected from a panel of oncologists and study referrals, supplied de-identified information via an online chart abstraction instrument, for ≤10 randomly selected patients with MGC. Patients were required to have received platinum/fluoropyrimidine first-line therapy, followed by second-line therapy or best supportive care (BSC) only. Data were analysed using summary statistics. **RESULTS:** Data were collected (2/2013–7/2013) for 122 patients from 37 physicians in Taiwan, and for 198 patients from 30 physicians in South Korea. Key demographics in Taiwan and South Korea, respectively, included: men (62.3%; 73.7%); mean age (59.8 years; 61.3 years). Following first-line treatment, patients in Taiwan and South Korea, respectively, received: second line (64.8%; 80.3%); BSC alone (35.2%; 19.7%); third line (13.1%; 23.2%). Inpatient hospitalisation rates (≥1 stay) in Taiwan and South Korea, respectively, were: overall, i.e. including periods of no line of treatment (82.8%, [101/122]; 48.5%, [96/198]); first line (63.1%, [77/122]; 35.9%, [71/198]); second line (53.2%, [42/79]; 30.2%, [48/159]); BSC alone (39.5%, [17/43]; 33.3%, [13/39]); third line (68.8%, [11/16]; 23.9%, [11/46]). In both countries, inpatient hospitalisations were of similar mean length (Taiwan, 8.6 days [SD 10.0]; South Korea, 8.7 days [SD 9.8]). Most common reasons for inpatient hospitalisation were chemotherapy infusions (Taiwan, 59.8%; South Korea, 67.9%) and disease symptom management (Taiwan, 30.4%; South Korea, 20.3%). Overall, antiemetics and analgesics were the most common supportive-care agents; endoscopy was the most common procedure. **CONCLUSIONS:** In both countries, >60% of patients with MGC received second-line treatment; post-first-line treatments were more common in South Korea than Taiwan. The health care resource burden of MGC is considerable in both countries, as hospitalisation is common, particularly in Taiwan.

PCN8

HOSPITAL COSTS ASSOCIATED WITH PLATINUM-BASED DOUBLETS IN THE FIRST-LINE SETTING FOR ADVANCED NON-SQUAMOUS NON-SMALL CELL LUNG CANCER IN CHINA: A RETROSPECTIVE COHORT STUDY

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OBJECTIVES: To compare the allocation of hospital costs per treatment cycle (HCTC) associated with first-line chemotherapy for advanced non-squamous non-small cell lung cancer (AdvNS-NSCLC) in Chinese patients. **METHODS:** Patients receiving first-line chemotherapy for AdvNS-NSCLC from 2010 to 2012 were retrospectively identified from two tertiary care hospitals in Hunan province, China. Propensity score matched treatment groups for pemetrexed-platinum versus other doublets were created for head-to-headcomparisons on the allocation of HCTC using Wilcoxon signed rank test. Multiple linear regression analyses were performed to assess the impact of the studied doublets on $\log_{10}$ scale of HCTC for supportive care, including non-chemotherapy drugs and non-drug care, by comparing vinorelbine-platinum in patients stratified by tumor response and hematological adverse events. **RESULTS:** 447 patients were included to create propensity score matched treatment groups for pemetrexed-platinum versus docetaxel-platinum (61 pairs), paclitaxel-platinum (39 pairs), gemcitabine-platinum (93 pairs), and vinorelbine-platinum (73 pairs), respectively. Total HCTC was significantly greater with pemetrexed-platinum than other platinum doublets (median difference ranged from RMB 1,692 to RMB 7,400, $p \leq 0.001$, 1 RMB = 0.16 US$). Pemetrexed-platinum was associated with significantly higher HCTC for non-platinum cytotoxic agent (median difference ranged from RMB 4,636 to RMB 7,332, $p < 0.001$) but significantly lower HCTC for non-chemotherapy drugs (median difference ranged from –RMB 1,551 to –RMB 2,502, p ranged from < 0.001 to 0.012). There were no significant differences for platinum drugs or non-drug care. Pemetrexed-platinum was ranked lowest for the $\log_{10}$ scale of HCTC for supportive care in all patients (coefficient -0.174, p=0.015) and also in patients with any hematological adverse events (coefficient -0.199, p=0.013), neutropenia (coefficient -0.426, p=0.021) or leukopenia (coefficient -0.406, p=0.001). **CONCLUSIONS:** Among first-line Chinese AdvNS-NSCLC patients, non-platinum cytotoxic drug HCTC was significantly higher with pemetrexed-platinum. This was partially offset by significantly lower HCTC for non-chemotherapy drugs than other platinum-based doublets.

PCN9

ECONOMIC BURDEN OF FEBRILE NEUTROPENIA IN SOLID TUMOR AND LYMPHOMA PATIENTS: AN OBSERVATIONAL STUDY IN SINGAPORE

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OBJECTIVES: The primary objective of this study was to describe the economic burden on solid tumor and lymphoma patients who received inpatient management of chemotherapy-induced febrile neutropenia (FN). The secondary objective was to identify any clinical factors associated with the economic burden. **METHODS:** This was a single-center observational study conducted at the largest cancer center in Singapore. All of the adult cancer cases diagnosed with solid tumors or lymphoma and hospitalized due to FN from 2009 to 2012 were studied. The primary outcomes were the total hospital cost (uncensored) and the out-of-pocket cost (censored by government subsidy) per FN episode. Descriptive analysis was utilized to describe the cost within subgroups. Univariate analysis and multiple linear regression were conducted to identify the factors associated with higher FN costs. **RESULTS:** Four hundred and thirteen hospitalizations with FN were documented in 367 adult cancer patients. The mean total hospital cost was US$5,244 (95% CI: US$4,758-5,730) and the mean out-of-pocket cost was US$2,847 (95% CI: US$2,516-3,178), per FN episode for all of the hospitalizations. Lymphoma patients had a significantly higher total hospital cost ($p < 0.001$) and out-of-pocket cost ($p < 0.001$) than those with other types of cancer. The clinical factors associated with a higher total hospital cost were longer length of stay, longer time to recover the absolute neutrophil count, severe sepsis, and lymphoma as underlying cancer. The out-of-pocket cost was positively associated with longer length of stay, severe sepsis, lymphoma as underlying cancer, the therapeutic use of granulocyte colony-stimulating factor (GCSF), the private ward class, and younger patients. **CONCLUSIONS:** The economic burden of FN management in lymphoma cases was substantial compared with other solid tumors. Factors associated with a higher FN management cost may be useful for developing appropriate strategies to reduce the economic burden of FN for cancer patients.

PCN10

COST-EFFECTIVENESS ANALYSIS OF THE ORIGINAL DRUG ARGLABIN

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OBJECTIVES: The problem of treatment of breast cancer is one of the most important and most difficult in modern oncology. Breast cancer is currently tops the list of cancers in women. Domestic herbal preparation "Arglabin" was synthesized by Scientific-Production Center "Phytochemistry" (Kazakhstan) as a drug with anticancer and immunomodulatory activity for the complex therapy of malignant tumors. Purpose of the study was to evaluate the clinical and cost-effectiveness of the original drug "Arglabin" in patients with disseminated breast cancer in clinical practice. **METHODS:** We compared the cost-effectiveness of standard scheme of treatment of breast cancer with CMF (cyclophosphamide + methotrexate + fluorouracil) vs CMF with Arglabin as additional agent to standard treatment through performing a cost-effectiveness analysis (CEA) and cost of illness (COI). Effectiveness